

# Quantum 830 Valve

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding

## Value Priced Valve for High Purity Applications:

Parker Hannifin Corporation's Veriflo Division presents the 830 valve for use in solar and semiconductor applications. The 830 has many of the 930 Series valve features but at a lower price point.

Like the 930 valve, the 830 diaphragm valve is made from "Vericlean", Veriflo's low sulfur high purity 316L Stainless Steel, which enhances electropolishing, welding, and corrosion resistance

## Contact Information:

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## Product Features:

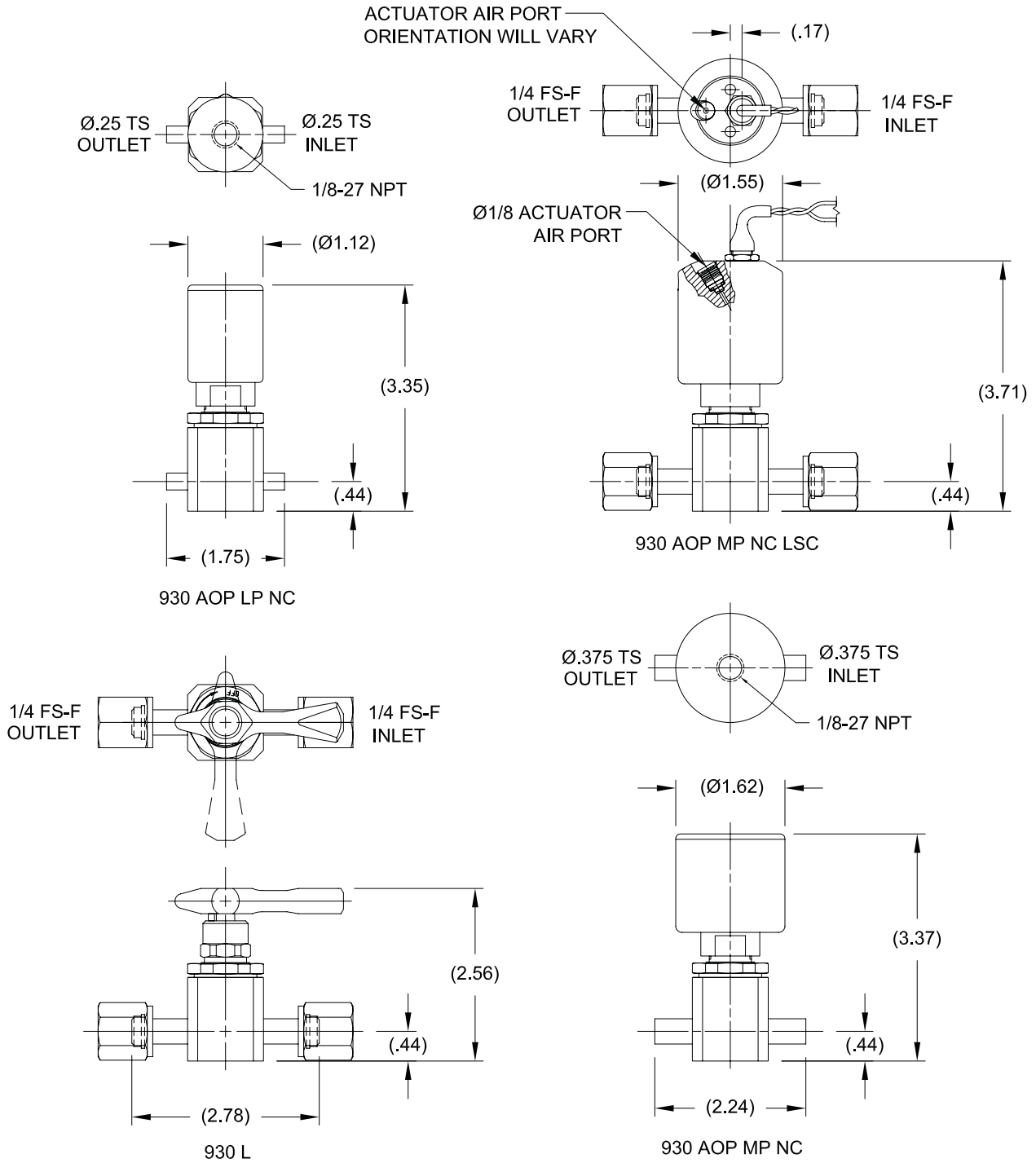
- Standard surface finish 10 micro inch Ra with flash EP.
- Internally threadless and springless.
- Fully functional from vacuum to 125 psig (for low pressure Air Operated Actuator), 300 psig (for manual and Medium pressure Air Operated Actuator versions.)
- 100% Helium leak tested.
- Aerodynamic, fully swept flow passages.
- Minimal particle generation and particle entrapment areas.
- Change from air operated actuator to lever or visa versa without intruding into wetted area.
- Maintains key dimensions of Veriflo's 930 valve.



ENGINEERING YOUR SUCCESS.

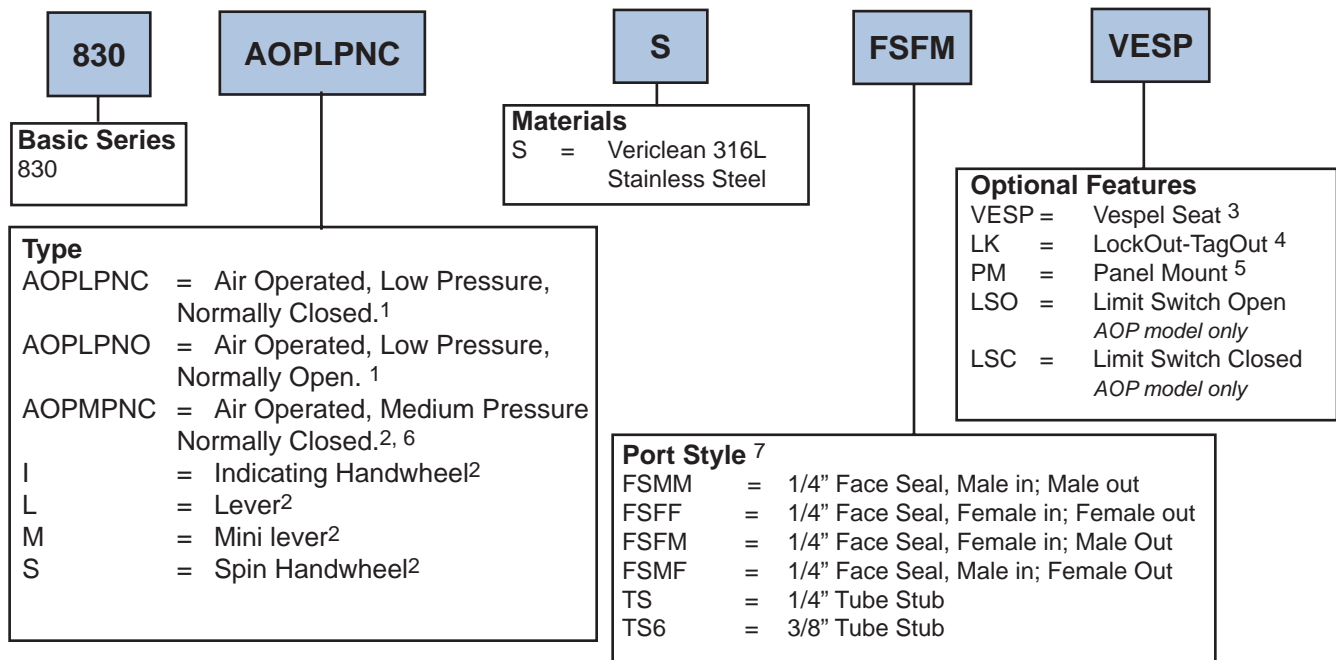
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## DIMENSIONAL DRAWING



Safety Guide and Installation and Operating instructions available at  
[www.parker.com/veriflo](http://www.parker.com/veriflo)

# Ordering Information



## NOTES:

- 125 psig (8.6 Barg) max pressure
- 300 psig (20.7 barg) max pressure
- Recommended for Nitrous Oxide (N<sub>2</sub>O) Service.
- LockOut-TagOut clamp for M type valves
- Not available with indicating handwheel (I) or AOP type valves.
- AOPMPNC available with normally open & normally closed limit switch
- 2 port and 3 port configurations are available.  
For 3 port, see 4504 Valve Selection Guide for A, B, C, F, G, M configuration selections.

## OFFER OF SALE:

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This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

# 830 Series Specifications

<b>Materials of Construction</b>	
<b>Wetted</b>	
Body	"Vericlean", Veriflo's custom high purity type 316L Stainless Steel™
Seat	PCTFE, Optional Vespel®
Diaphragm	Elgiloy® or equivalent
<b>Non-Wetted</b>	
Nut	316L Stainless Steel
Cap	316L Stainless Steel
<b>Operating Conditions</b>	
Max. Pressure	
AOP, LP	125 psig (8.6 barg)
AOP, MP/Manual	300 psig (20.7 barg)
Min. Pressure	Vacuum
Temperature:	0°F to 150°F (-18°C to 66°C)
Bake Out	250°F (121°C) in the open position
<b>Functional Performance</b>	
<b>Flow Capacity by Type</b>	
All AOP and handwheel	C <sub>v</sub> 0.3
Lever, Mini-lever and Indicator knob	C <sub>v</sub> 0.22
<b>Design</b>	
Leak Rate	
External	≤2X10 <sup>-10</sup> scc/sec He, In board method
Internal	≤1X10 <sup>-9</sup> scc/sec He
Proof Pressure	
AOPLP	188 psig (13 barg)
AOPMP, L, I, M, S	450 psig (31 barg)
Burst Pressure	
AOPLP	375 psig (26 barg)
AOPMP, L, I, M, S	900 psig (62 barg)

<b>Standard Configuration</b>	
Face Seal (FS):	Any configuration of Face Seal male and/or female fittings.
Length	Face Seal Gland to Gland
1/4"	2.78 <sup>+</sup> 0.02 in. (70.6 <sup>+</sup> 0.5 mm)
Length	Tube Stub Inlet & Outlet End to End
1/4"	1.75 <sup>+</sup> 0.02 in. (44.5 <sup>+</sup> 0.5 mm)
3/8"	2.24 <sup>+</sup> 0.02 in. (56.9 <sup>+</sup> 0.5 mm)
<b>See 4504 Valve Selection Guide for 3 port configuration options.</b>	
<b>Internal Volume</b>	2.64 cc (including face seal fittings)
<b>Surface Finish</b>	10 micro inch with flash EP
<b>Approx. Weight</b>	1.75 lbs. (.80 kg)

